

AMENDMENTS TO THE CLAIMS

This listing of the claims will replace all prior versions and listings of the claims in the application.

Please cancel claims 1-17 without prejudice or disclaimer.

Listing of the Claims:

1-17. (Cancelled)

18. (New) An implant for implantation into a hole of a recipient's bone comprising:

at least one outer surface having a first cross-section diameter configured to be at least approximately equal to the cross-section diameter of the bone hole;

at least one inner surface having a second cross-section diameter configured to be smaller than both the cross-section diameter of the hole and said first cross-section diameter, wherein a space is defined between said outer surface, said inner surface and the recipient's bone; and

at least one growth stimulating substance (GSS) retained on said implant.

19. (New) The implant of claim 18, wherein said at least one outer surface is configured as outer crest portions of a screw-thread, and said at least one inner surface is configured as inner portions of a screw-thread.

20. (New) The implant of claim 19, wherein said screw-thread extends along a majority of the circumference of the implant.

21. (New) The implant of claim 18, wherein said outer surface is dimensioned to cooperate with the bone hole to provide an initial positional stability upon implantation.

22. (New) The implant of claim 18, wherein said first cross-section diameter of said outer surface is approximately 5-20% greater than the cross-section diameter of the bone hole to provide an initial positional stability upon implantation.

23. (New) The implant of claim 18, further comprising:
at least one recess disposed on said implant, wherein said GSS is disposed within said recess.
24. (New) The implant of claim 23, wherein said recess is configured as a longitudinal recess disposed at least part longitudinally along said implant.
25. (New) The implant of claim 23, wherein said recess is configured as a transverse recess disposed at least part circumferentially around said implant.
26. (New) The implant of claim 18, further comprising:
at least one porous oxide layer disposed on said implant, configured to store said GSS thereon.
27. (New) The implant of claim 18, wherein said implant is configured to be implanted by a pressing force applied to implant.
28. (New) The implant of claim 18, wherein said GSS is adapted and provided in gel form.
29. (New) The implant of claim 18, wherein said first cross-section diameter and said second cross-section diameter are configured based on at least one measurement taken on the recipient's bone hole.
30. (New) The implant of claim 29, wherein said measurement is in the form of a CT-scan.

31. (New) A method for delivering an implant and growth stimulating substance (GSS) into a recipient's bone comprising:

providing an implant comprising:

at least one outer surface having a first cross-section diameter configured to be at least approximately equal to the cross-section diameter of the bone hole;

at least one inner surface having a second cross-section diameter configured to be smaller than both the cross-section diameter of the hole and said first cross-section diameter;

and at least one GSS disposed on the implant;

forming a hole in the bone of the recipient, wherein the recipient's body will secrete cell-containing fluids into the formed hole;

inserting the implant in the hole;

defining a space between said outer surface, said inner surface and the recipient's bone;
and

allowing interaction between the secreted fluids and the GSS.

32. (New) The method of claim 31, wherein said inserting the implant comprises applying a pressing force on the implant.

33. (New) The method of claim 31, wherein said inserting the implant further comprises penetrating the bone by approximately 5-20% of said first cross-section diameter thereby providing an initial positional stability.

34. (New) The method of claim 31, wherein said forming a hole comprises drilling the bone of the recipient.